RTI Infrastructure Decisions

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Webinar Sequence

1. (Last week) Big picture about RTI
2. Infrastructure of RTI in the school
3. Readiness and planning for RTI
Webinar Focus

- Emphasis is on elementary school settings
- Largely high-altitude overview of RTI and implementation, but illustrating research-based options
- Your questions are welcome

For middle and high school RTI4Success.org ---
- Implementation brief (2011)
- Scheduling brief (2011)
- “Frequently Asked Questions” brief (2011)
- Essential components report (2011)
- RTI 101: Middle School Implementation Training module (2011)
Today’s Intended Outcomes

Participants will learn:

1. Review of rationale and components for RTI
2. Team functions and membership
3. Logistical decisions (e.g., tools & scores)
Part 1

REVIEW: RATIONALE AND COMPONENTS
What is RTI?

= Responsiveness to intervention

Organizational preventative framework for instructional and curricular decisions and practices based on students’ responses

RTI Components

– Screening
– Tiers of instruction
– Progress monitoring
– Decision-making rules
Essential Components of RTI
New York’s Three Tier Framework

- **Tier I**: Core Instruction
  - Core instruction or primary intervention intended for all students in the general education classroom.

- **Tier II**: Core Instruction + Supplemental Intervention
  - Secondary Intervention intended for 10-15% of students who are not making adequate progress with core instruction at Tier 1.

- **Tier III**: Core Instruction + Customized Intervention
  - Tertiary intervention intended for about 1-5% of students who are not responding to instruction at Tiers 1 & 2.
Another Perspective

Ehren, Ehren & Proly (in preparation)
Thinking about teams and logistics

CHANGE IS ALWAYS IN A CONTEXT!
Analyzing Change vs. Stability

RTI Components
(Technology)
- Current practices
- Change agent

Perceived Role
(Theory of Action)
* Personal beliefs
* Institutional beliefs

School Culture
(Social System)
• Team relationships
• Team chemistry

William Reid (1987)
Challenges in tiered delivery systems

- Establishing solid core instruction in language arts and mathematics (Tier 1; primary preventative level)
- Differentiation between secondary and intensive intervention supports (Secondary and tertiary levels)
- Consistency of data based decision-making (Screening and progress monitoring data & cut points)
- Relationship between intensive intervention and special education; Variability of serving students with disabilities
What is Implementation fidelity?

- Fidelity of implementation refers to how closely the prescribed procedures of a process are followed.
- Fidelity of implementation checks serve the purpose of identifying areas of strength on which schools can build and areas of deficiency that need to be remedied.

(Mellard & Johnson, 2007)
Essential Components of RTI
(Partial) Indicators of Fidelity

- 80-85% of students pass tests
- Improved results over time
- High percentage of students on trajectory

(Reschly & Gresham, 2006)

Why do you suppose that these indicators are insufficient?
5 Aspects of Fidelity

1. Adherence
2. Exposure
3. Quality of delivery
4. Participant responsiveness
5. Program differentiation

(Dane & Schneider, 1998)
Practices to Ensure Fidelity of Implementation

1. Link interventions to improved outcomes
2. Definitively describe operations, techniques, and components
3. Clearly define responsibilities of specific persons
4. Create a data system for measuring operations, techniques, and components
5. Create accountability measures for non-compliance

(Johnson, Mellard, Fuchs, McKnight, 2006)
Part 2

TEAM FUNCTIONS AND MEMBERSHIP
Core Teams

- Planning
  - District level
  - School level
- Implementation
  - District level
  - School level

- Special teams
  - Content level
  - Grade level
  - Data teams
District Level Core Team

Represent
- Administrators
- Related service personnel
- School psychologists
- General education teachers
- Special education teachers
- ESL/bilingual teachers and
- Parents

Decisions
- School, grade, subject area needs (current status)
- Interventions for tiers
- Screening and progress monitoring procedures
- Screening & progress monitoring tools
- Professional development
- Parent notification
District & Building Level Planning
Start discussions about --

A. Perceived Need
   - Extent to which the RTI is relevant to local needs?

B. Perceived Benefits
   - Extent to which RTI will achieve desired benefits at the local level?
   - Extent to which providers feel they are able to do what is expected?
   - Possession of the skills necessary for RTI implementation?

C. Collective Self-efficacy

D. Skill Proficiency
FULL INTERVENTION BEGINS

Using Data For Focused Intervention

- **Each teacher** uses data to identify areas of intervention for his/her class as a whole and for individual students who were not proficient.

- **Grade Level Teams** meet to discuss team-wide areas of improvement and ways to address the needs in the classroom (Daily Review, etc.).

- **Vertical Teams** share grade level results to identify school-wide trends, share ideas, and develop school-wide instructional strategies.

- **Data Lead Team** uses data to target students in need of in-depth Tier 2 and 3 intervention/individualized tracking as well as teachers in need of additional support and training.
The Data Lead Team will be responsible for data collection, organization, intervention strategies, implementation and evaluation on a school wide level.
What will it take to achieve high quality implementation?

1. Broad participation
2. Substantial agreement
3. Systemic leadership
4. Observable change

Pristine & Bowen, 1993
1. All School Participation

At least a large portion of the faculty and staff engaged in some essential activities

- Planning
- Implementing
- In RTI, e.g., analyzing student indicators of responsiveness
  - Academic learners
  - Behavioral learners
  - Cognitive learners
  - Dispositional learners
2. Getting Substantial Agreement

Means that a school is well on the road when everyone comes to understand that the whole school must change (including para, administrative, instructional staff, unions/organization, parents, related services staff)

- What changes we’ll make
- Strategic timelines: When the changes will get made
- Planning ways to implement them
- Around RTI, e.g., continuity of tiered curricular choices and delivery schedules
Opposing Views on Garnering Buy-In

One view --
Deeply steep educators in the philosophy and the core principles of the approach at the onset

McLaughlin & Mitra, 2002

An alternative view --
Understanding and motivation will be built as implementation leads to positive changes in the school

Connell, 2002
3. Systemic Leadership

The goal is that each person must lead in his or her own way, within his or her expertise.

- Engaging the stakeholders
  - Administrators
  - Faculty
  - Students
  - Community members
- Engagement is planned and meaningful
- Answering the questions of who is best to decide and by when?
RTI Leadership Roles

- The team captain: Start the ball rolling
  - Vision
  - Values
  - Goal

- Focusing efforts: Keeping RTI at or near the top of the agenda
  - Specific, clear targets
  - Emphasize the rigor of implementation
  - Use the student responsiveness data

- Sustaining momentum: Keeping the ball rolling
  - Celebrate the successes
  - Understand the ebb and flow
  - Use the student responsiveness data
Leadership Role

Building administrators

• Your emphasis is on the *change process knowledge*
• Identify your staff and consultants to provide the *technical knowledge*
4. Observable & Sustained Change

Means visible changes in the structures

- Organization of teams among staff
- Providing teams with collaboration time
- Around RTI e.g., universal screening, objective rules for judging responsiveness
Litmus Test for Progress

- Examine your student data
- How would you fill in your triangle?
Your Next Steps

- Which will be your first focus?
- Which poses the greatest challenge?
- What resources would be most helpful in meeting that challenge?
Part 3

LOGISTIC DECISIONS: SCHEDULING, TOOLS, CUT SCORES, AND INTERVENTIONS
Getting Started: Work on the schedule

Middle schools reported that they -

- Established a planning team with relevant staff members
- Set a regular meeting time for the RTI planning team
  - Reviewed class data profiles
  - Reviewed student data profiles
  - Determined which students needed intervention classes
RTI Meetings

When schools repurposed existing meeting times, they were able to do the following:

- Evaluate previous meeting time usage and outcomes
- Communicate purpose, goals, and anticipated outcomes for the meeting time
- Establish a clear agenda that included intended goals and outcomes
- Evaluate the progress and efficiency of the meetings
Conclusions

Scheduling changes for RTI included

- Establishing planning meeting times
- Adjusting class schedules for the entire school
- Monitoring students’ progress through data and making scheduling changes
- Adjusting the schedule as necessary
- Accommodating the needs of students and staff
# Screening Tools

(RTI4Success/org/screeningtools)

<table>
<thead>
<tr>
<th>Tools</th>
<th>Area</th>
<th>Classification Accuracy</th>
<th>Generalizability</th>
<th>Reliability</th>
<th>Validity</th>
<th>Disagged Reliability, Validity, and Classification Data for Diverse Populations</th>
<th>Efficiency</th>
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<td>Classworks Universal Screener</td>
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<td>easyCBM</td>
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<td>Group Assessment and Diagnostic Evaluation</td>
<td>* Group Math Assessment and Diagnostic Evaluation (G-MADE)</td>
<td>Moderate Low</td>
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<td>Individual Group</td>
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National Center on Response to Intervention
# Progress Monitoring Tool Reviews

## Progress Monitoring Mastery Measures

View the Progress Monitoring General Outcome Measures Tools Chart

<table>
<thead>
<tr>
<th>Tools</th>
<th>Area</th>
<th>Skill Sequence</th>
<th>Sensitive to Student Improvement</th>
<th>Reliability</th>
<th>Validity</th>
<th>Pass/Fail Decision</th>
<th>Disaggregated Reliability and Validity Data</th>
<th>COMPARE</th>
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</thead>
<tbody>
<tr>
<td>Accelerated Math</td>
<td>Math</td>
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<td>RTI Program Screening &amp; Progress Monitoring</td>
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<td>MathFacts in a Flash</td>
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<td>Study Island</td>
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<tr>
<td>Study Island</td>
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**Legend:**
- **●** Convincing evidence
- **○** Partially convincing evidence
- **△** Unconvincing evidence
- **—** Data unavailable or inadequate
Reviews

1. Aimsweb
2. CBM-Reading
3. Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
4. Easy CBM
5. Edcheckup Standard Reading Passages
6. Istation Indicators of Progress
7. Mclass Math
8. Monitoring Basic Skills Progress
9. mClass Math
10. Orchard Software
11. Scholastic Rdg/Math Inventory
12. STAR
13. STEEP
14. Vanderbilt RTI Monitor
15. Yearly Progress Pro

Progress Monitoring

- This tools chart reflects the results of the fourth annual review of progress monitoring tools by the Center's Technical Review Committee (TRC).
- *The Center defines progress monitoring* as repeated measurement of academic performance to inform instruction of individual students in general and special education in grades K-8. It is conducted at least monthly to (a) estimate rates of improvement, (b) identify students who are not demonstrating adequate progress and/or (c) compare the efficacy of different forms of instruction to design more effective, individualized instruction.
## Tier 1: Confirming Risk Status With PM

At the end of 5-8 weeks, student risk status is confirmed or disconfirmed.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Inadequate Reading Slope</th>
<th>Inadequate Math Computation Slope</th>
<th>Inadequate Math Concepts and Applications Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>&lt; 1 (LSF)</td>
<td>&lt; 0.20</td>
<td>&lt; 0.20</td>
</tr>
<tr>
<td>Grade 1</td>
<td>&lt; 1.8 (WIF)</td>
<td>&lt; 0.25</td>
<td>&lt; 0.30</td>
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<tr>
<td>Grade 2</td>
<td>&lt; 1 (PRF)</td>
<td>&lt; 0.20</td>
<td>&lt; 0.30</td>
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<tr>
<td>Grade 3</td>
<td>&lt; 0.75 (PRF)</td>
<td>&lt; 0.20</td>
<td>&lt; 0.50</td>
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<td>Grade 4</td>
<td>&lt; 0.25 (Maze)</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
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<tr>
<td>Grade 5</td>
<td>&lt; 0.25 (Maze)</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
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<tr>
<td>Grade 6</td>
<td>&lt; 0.25 (Maze)</td>
<td>&lt; 0.50</td>
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</table>

Note: These figures may change pending additional RTI research.
## Secondary Prevention: Response in Math

<table>
<thead>
<tr>
<th>Grade</th>
<th>Computation</th>
<th>Concepts and Applications</th>
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<tbody>
<tr>
<td></td>
<td>&lt; Slope &lt; End level</td>
<td>&lt; Slope &lt; End level</td>
</tr>
<tr>
<td>Grade 1</td>
<td>&lt; 0.50 &lt; 20 digits</td>
<td>&lt; 0.40 &lt; 20 points</td>
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<tr>
<td>Grade 2</td>
<td>&lt; 0.40 &lt; 20 digits</td>
<td>&lt; 0.40 &lt; 20 points</td>
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<tr>
<td>Grade 3</td>
<td>&lt; 0.40 &lt; 20 digits</td>
<td>&lt; 0.70 &lt; 20 points</td>
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<td>Grade 4</td>
<td>&lt; 0.70 &lt; 20 digits</td>
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<td>Grade 5</td>
<td>&lt; 0.70 &lt; 20 digits</td>
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<tr>
<td>Grade 6</td>
<td>&lt; 0.70 &lt; 20 digits</td>
<td>&lt; 0.70 &lt; 20 points</td>
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</table>

Note: These figures may change pending additional RTI research.
Review Methods

The following articles provide detailed information on the methodology used in conducting the literature reviews on the BEE.

- Criteria for Inclusion in the BEE
- Interpreting Effect Sizes
- What Works? Issues in Synthesizing Educational Program Evaluations (PDF, 375k)
- Understanding Bias Due to Measures Inherent to Treatments in Systematic Reviews in Education (PDF, 200k)
- Effects of Sample Size on Effect Size in Systematic Reviews in Education
# BEE: Reading reviews

<table>
<thead>
<tr>
<th>Program Ratings</th>
<th>Strong Evidence of Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rating</strong></td>
<td><strong>Program</strong></td>
</tr>
</tbody>
</table>
| ![Gold](image)  | Peer-Assisted Learning Strategies (PALS) | IP       | A technique in which children work in pairs, taking turns as teacher and learner, to learn a structured sequence of literacy skills, such as phonemic awareness, phonics, sound blending, passage reading, and story retelling. | E-mail: pals@vanderbilt.edu  
Website: kc.vanderbilt.edu/pals |
| ![Gold](image)  | Reading Reels                     | IP       | A form of multimedia used within the Success for All program (see above), in which video content is embedded within teachers’ lessons. Brief animation, puppet skits, and live-action segments, about five minutes daily in total, model beginning reading strategies for children and teachers. | E-mail: sfainfo@successforall.org  
Website: www.successforall.org |
| ![Gold](image)  | Success for All                   | Curr + IP| Provides schools with a K-5 reading curriculum that focuses on phonemic awareness, phonics, comprehension, and vocabulary development, beginning with phonetically-controlled mini-books in grades K-1. Cooperative learning is extensively used at all grade levels. Tutoring is provided to struggling readers, and parent involvement is encouraged. | E-mail: sfainfo@successforall.org  
Website: www.successforall.org |
# RTI Center Instructional Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Study</th>
<th>Participants</th>
<th>Design</th>
<th>Fidelity of Implementation</th>
<th>Measures</th>
<th># of Outcome Measures</th>
<th>Effect Size</th>
<th>Disaggregated Data Available</th>
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<tr>
<td>Academy of MATH</td>
<td>* Torkov (2011)</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>4 Math</td>
<td>P = 0.59</td>
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<td>○</td>
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<td>AWARD Reading</td>
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<td>○</td>
<td>●</td>
<td>5 Reading</td>
<td>P = 0.23</td>
<td>D = 0.29</td>
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</table>

Note: ● indicates a strong implementation fidelity, ○ indicates a moderate implementation fidelity, and □ indicates a weak or no implementation fidelity.
Additional Resources

• National Center on Response to Intervention
  – www.RTI4Success.org
• National Network of Partnership Schools (NNPS)
  – www.csos.jhu.edu/p2000/
• National Center on Intensive Intervention
  – www.intensiveintervention.org
RTI in Secondary Settings: Scheduling Brief

For additional information and resources, please see our information brief on scheduling

Scheduling Frequently Asked Questions
Preview

What is RTI?
Policy Context
Screening
Progress Monitoring
Prevention levels
  • Tier 1
  • Tier 2
  • Tier 3
Fidelity of Implementation
Concluding Observations

RTI
A Practitioner's Guide to Implementing Response to Intervention

Daryl F. Mellard
Evelyn Johnson

A JOINT PUBLICATION
CORWIN PRESS
NAESP
Related Research


Webinar #3: November 18th
Topic: RTI implementation in your school

Thank You
On the web @ RTI4Success.org

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